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THE "ACADEMIC" VS. THE "TOTAL" HIGH SCHOOL AVERAGE--A RE-EXAMINATION.

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THE "ACADEMIC" HIGH SCHOOL GRADE AVERAGES OF APPLICANTS TO SOUTH GEORGIA COLLEGE IN THE FALL OF 1964 (526) AND THE FALL OF 1965 (711) WERE COMPARED WITH THEIR TOTAL GRADE AVERAGES. THE MEAN TOTAL GRADE AVERAGE OF THE 1964 GROUP WAS SIGNIFICANTLY HIGHER THAN THE MEAN ACADEMIC AVERAGE. IN 1965, WHEN THE COLLEGE REMOVED SUCH COURSES AS MUSIC FROM THE LIST OF ACADEMIC COURSES, THE DIFFERENCE INCREASED. IN GENERAL, AS STUDENTS ACADEMIC GRADE AVERAGES INCREASED, THE DIFFERENCE BETWEEN ACADEMIC AND TOTAL GRADE AVERAGES DECREASED. DIFFERENCES IN THE TWO TYPES OF AVERAGES ARE ESPECIALLY IMPORTANT IN INSTITUTIONS WITH RELATIVELY LOW ADMISSION REQUIREMENTS, AND THE RELATIONSHIP SHOULD BE CAREFULLY EXAMINED WHEN THE STANDARDS FOR ADMISSION ARE CHANGED. (AD)

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The "Academic" vs. the "Total" High School Average: A Re-Examination

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The "Academic" vs. the "Total" High School Average: A Re-Examination[1]

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A number of studies have been made to determine if there is any difference in using college applicants' "total" high school averages (average of all credit courses taken in high school) as compared to applicants' "academic" high school averages (average of only academic courses taken in high school) as a criterion for admission. Through comparing the correlations of these two indices with college grades, it has generally been found that the total HSA is as good a predictor of college grades as is the academic HSA (Carlson & Milstein, 1958; Gelso & Klock, in press; Hills, 1966; Willingham, 1964). However, it is possible that, while the correlations between these two indices and college grades do not differ significantly, the use of one could have a different effect on admissions' standards than use of the other. This difference would occur if the mean total HSA differed significantly from the mean academic HSA.

PURPOSE AND PROCEDURE

This study is an attempt to gather evidence on whether there are any significant differences in college applicants' mean total HSA and their

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[1]The authors were assisted by Marylin B. Gladney and John R. Hills in some phases of planning and analyses of this study.

mean academic HSA. Of interest, also, is whether the difference in total and academic HSA is related to two other variables: (1) how high the applicant's academic HSA is, and (2) the proportion of non-academic courses taken in high school.

To satisfy these purposes, the mean academic and total HSA's of all of the Fall Quarter applicants in 1964 (N=526) and 1965 (N=711) to South Georgia College, a coeducational, public, residential junior college, were compared. In addition, each of these two groups of applicants were divided into four quarters on the basis of their academic HSA's and comparisons were made of the mean academic and total HSA's of each of the four quarters separately. Finally, the concept of what constituted an "academic" course at South Georgia College changed considerably from 1964 to 1965, and this change enabled the investigators to explore the effects which might occur in the differences between academic and total HSA's when different proportions of applicants' high school coursework are accepted as academic.

RESULTS

It was found that the mean total HSA of the 1964 Fall Quarter applicants was significantly higher than their mean academic HSA (2.31 vs. 2.12 on a 4-point scale: $t=5.90$, $p<.001$). The difference in the two HSA means, separated into four quarters according to the 1964 applicants' academic HSA's, is presented on Table 1.

Table 1

Difference in Total and Academic Mean HSA's of Four Quarters

for 1964 Fall Quarter Applicants

Quarter	HSA Range	N	Acad. HSA	Total HSA	Difference	"t"	p
1st Q.	2.5-4.0	142	2.92	3.02	.10	1.62	.20
2nd Q.	2.1-2.4	114	2.24	2.40	.16	2.24	.05
3rd Q.	1.7-2.0	146	1.85	2.08	.23	3.77	.001
4th Q.	.8-1.6	124	1.40	1.67	.27	4.09	.001

The data on Table 1 indicate that there was a relationship between how high applicants' actual HSA's were and the extent of the difference between their mean total and academic HSA's. A very interesting phenomenon can be observed on Table 1. The lower the quarter of mean academic HSA, the greater the difference between the academic and the total HSA of the applicants. It can also be seen that for applicants with academic HSA's of about 2.5 and higher, the academic and total HSA's do not differ significantly· while the difference between these two indices is significant for the three quarters which include all HSA's below 2.5. In addition, the difference between the mean total and mean academic HSA's in the 2nd, 3rd and 4th quarters becomes progressively larger.

In 1964 approximately 20% of the high school courses taken by the applicants to South Georgia College were considered non-academic. These courses included physical education, driver education, band, chorus,

teacher's aid, etc. However, in 1965 the college stiffened its concept of "academic" and included in calculating HSA's only those courses which were strictly academic. Thus, all business, home economics, music, art, and vocational-technical courses were not included in the HSA computation. This change resulted in 30% of the courses taken by the 1965 Fall Quarter applicants being considered non-academic.

Table 2 compares the mean academic with the mean total HSA's of the 1965 group separated into four quarters on the basis of their academic HSA's. Since previous research (Elton, 1965; Gelso & Klock, in press) has demonstrated that 3 year (grades 9, 10, and 11) and 4 year (9, 10, 11, 12) HSA's do not differ significantly, only the 3 year HSA's for the 1965 applicants were computed.[2]

Table 2

Difference in Total and Academic Mean HSA's of Four Quarters for 1965 Fall Quarter applicants

Quarter	HSA Range	N	Acad. HSA	Total HSA	Difference	"t"	p
1st Q.	2.5-4.0	163	2.96	3.08	.12	1.77	.10
2nd Q.	2.0-2.4	172	2.18	2.39	.21	3.16	.01
3rd Q.	1.6-1.9	208	1.75	2.02	.27	4.51	.001
4th Q.	.2-1.5	168	1.29	1.62	.33	4.96	.001

It can be seen on Table 2 that, as with the 1964 applicants, the

[2]It was stated that 30% of the 1965 applicants' high school courses were considered to be non-academic. This 30% was arrived at by checking the applicants' transcripts for grades 9, 10, and 11.

difference between the total and academic HSA's is significant in the 2nd, 3rd, and 4th quarters; and this difference becomes progressively larger from the 1st to the 4th quarter. The data on Tables 1 and 2 differ, however, in that the difference between the total and the academic HSA's is slightly greater on Table 2 than on Table 1. Thus, when a more stringent standard of "academic" was used in 1965, the difference between the two indices increased. Finally, when the mean academic and total HSA's of all of the 1965 applicants combined were computed, the resulting difference was highly significant (2.26 vs. 2.02: $t=7.50$, $p<.001$).

DISCUSSION AND CONCLUSION

Caution whould be taken in generalizing the specific findings of this study, since it was done at one institution. However, the results do appear to have some important implications. These results indicate that, if an institution decides to change its policy from including in its HSA computation only the academic courses taken in high school by its applicants to computing its applicants' total HSA's (which is much more economical time-wise) or vice versa, the college would do well to study whether there are serious differences in these two indices. If significant differences do occur, the college would have to re-set its HSA cutoff point for admission when it changed from using one index to another (academic to total or vice versa).

The present study indicates that differences between applicants' total and academic HSA's do occur when applicants' academic HSA's are below about 2.5 (A=4.0). Highly select institutions, thus, may not

need to make the above-mentioned re-set on their HSA admissions cutoff when they change indices. However, since most institutions have HSA cutoffs for admissions which are below 2.5, it would seem calculating the difference between the total and academic HSA means of applicants would be important at most institutions when a change is planned. Furthermore, the findings imply that the lower a colleg's admissions' standards are, the more important it is to determine the difference between its applicants' total and academic HSA's and re-set its HSA cutoff accordingly when the institution decides to switch from one index to the other.

Finally, this study implies that if a college is using its applicants' academic HSA's as one of the criteria for admission, but changes the concept of what constitutes an "academic" high school course (whether the change is toward a stiffer or looser concept), it would also be important for the college to see if this concept change resulted in different mean HSA's for the same group of applicants. In the present study, a concept change which resulted in 10% fewer high school courses from one year to the next being accepted as academic did have a slight effect on the difference between applicants' total and academic HSA's.

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